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## Bad medicine: the menopause

Life starts at low tide. The young, we can hardly see the water as it slowly creeps in. But in your 40s you get the occasional glint of water, but by your 50s it is always at the corner of your eye. Youth is wasted on the young but this revelation is only available to the old. At 50 everything begins to change, children leave home, careers ring hollow, the young disrespect you as you disrespected the old and they joke that all middle age people look the same, even the men and the women! Women's hormones stutter and stop and men's hormones begin to fade. Fifty is about loss. We rail against this; sports cars, hair dye, teenage clothes and Botox. For acceptance is no longer an option in our vacuous first world society. So the menopause is a big medical business, with millions taking daily medications for decades.

Prior to 2002 we told women that HRT was safe, prevented dementia and osteoporosis and, incredibly, prescribed for primary prevention of cardiovascular disease,<sup>1</sup> all based on small observational pharmaceutical-sponsored studies. Celebrities proclaimed HRT the fountain of youth.<sup>2</sup> Waves of reps carpet-bombed doctors with sandwiches, stress balls, pens, leaflets, and plastic uterus. Paid consultant educationists blasted out the popularist message of under treatment. But the large prospective Women's Health Initiative<sup>3</sup> trial demonstrated increased cardiovascular disease and cancers. HRT went through the change, hero to zero.

Since then, menopause experts and industry has been scrabbling around to find non-hormonal treatments to peddle. Recent market projections suggest hot flashes to be worth over \$5 billion a year by 2023.<sup>4</sup> So two familiar old druggie friends were conscripted, antidepressants and gabapentinoids. Hired consultant educationists are now selling these 'new' treatments at 'update' courses for GPs.

But we should always scrutinise the original evidence. Firstly, there is no biological mechanism making antidepressants and gabapentinoids actually work for vasomotor symptoms. Their use is scientifically irrational. Also, research conflates statistical

significance with clinical significance, a standard pharma trick. The truth is, compared to placebo, these agents reduce the numbers of hot flushes by around one per day in absolute terms.<sup>5–7</sup> The research also uses corrupt questionnaire-based quality of life scores called 'Patient Global Impression of Change' to suggest small improvements in overall 'wellbeing'<sup>5</sup> These are the same highly-subjective research tools that provided the 'evidence' that unleashed the greatest iatrogenic catastrophe of harm in modern medicine: the widespread use of opioids in non-malignant pain. And as antidepressants and gabapentinoids are both psychoactive its not surprising patients report short term improvement in wellbeing.

But these medications are not nice. Antidepressants are associated with significant discontinuation syndromes and patients struggle to stop them.<sup>8</sup> Gabapentinoids are widely abused and associated with withdrawal and dependence.<sup>9</sup> None of these medications are actually licensed for this indication. So what about the regulators? The Food and Drug Administration's (FDA) advisory panels strongly rejected the evidence for gabapentinoids and antidepressants.<sup>10</sup> Despite this, Brisdelle® (paroxetine) costing \$194 a month was given a licence.<sup>11,12</sup> Big Medicine and Big Pharma doesn't let bad science get in the way of profit. The FDA is but a paper tiger.

Finally, in all studies, placebos have large and sustained impacts on flushes and wellbeing in any case. HRT works but is associated with small but significant risks. But using antidepressants and gabapentinoids for the menopause is bad science and bad medicine.

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DOI: 10.3399/bjgp16X685429

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